

ABSTRACT OF THE DISCLOSURE

Alkali metal chlorates are produced by electrolyzing an anolyte contained in an anode compartment of an electrolytic cell, the anode and cathode compartments separated by means of a permselective membrane having low alkali metal ion transport efficiency. The final chlorate product can be directly crystallized from the electrolyzed anolyte or fed directly to a chlorine dioxide generator. Alternatively, a microporous, hydrophilic diaphragm can be substituted for the permselective membrane provided that the catholyte compartment is maintained at a higher hydraulic pressure than the hydraulic pressure in the anolyte compartment.